# Reference

### PROBLEMS AND SOLUTIONS TABLES

Please use these tables if you encounter problems operating the system. Look in this section for a description of the problem before calling Bell ExpressVu Customer Service Call Centre. Many problems arise from basic misunderstandings of how the system works, especially when one is just becoming familiar with it. These tables address many problems, usually with a simple solution for each one. To solve a particular problem:

- 1. Review the section in this Guide that relates to the problem.
- If you cannot find a solution, then find the section in the following tables that relates to the problem. Look down the **What Is Happening** column until you find the problem
- 3. For better understanding, read the information in the **Possible Reason** column.
- 4. Try each of the suggested solutions in the **What to Do** column.
- 5. If this does not help, call Bell ExpressVu Customer Service Call Centre at 1-888-SKY-DISH, or see the home page at http://www.bell.ca/satellite on the World Wide Web. **Note:** Before calling Bell ExpressVu Customer Service Call Centre with a problem, have ready the date of purchase and either your customer account number, the receiver conditional access number, or the receiver model number. Display the **Important System Information** menu to find these numbers (see Ordering Your Bell ExpressVu Programming on page 3-1). Also, write down the contents of any error messages that the receiver displays on the television screen.

### **ERROR MESSAGES IN THE MENUS**

What is Happening	Possible Reasons Why	What to Do
The receiver displays an "ERROR" message on the TV screen.	When the receiver finds a problem, it displays an ERROR message on the TV screen.	In most cases, the ERROR message explains the error. Sometimes, the ERROR message prompts you to do something. However, usually all you need to do is select the <b>OK</b> option on the ERROR message to clear the message from the TV screen.
ERROR message text: "The number of password entry retries has been exceeded. Please try again later."	You may try to enter the password three times. If you do not enter the correct password any of those times, then you must wait several minutes until you may try again.	Wait until several minutes have passed, and try again.
ERROR message text: "The front panel buttons are locked."	You or someone else locked the receiver front panel buttons.	You <i>must</i> use the remote control to unlock the receiver front panel buttons.
ERROR message text: "Unable to acquire signal." or "Unable to acquire program guide information."	The receiver is not receiving a strong enough signal to maintain an uninterrupted, clean picture.	Check the condition of all the coaxial cables and cable connections in the system. Check the condition of the dish mounting and aiming. If needed, contact your installer to re-aim the dish. If the system is OK, then there may be a weather-related problem with transmission of the satellite signal.
ERROR message text: "Please insert your Smart Card."	Smart card is missing or not inserted correctly.	Check that the Smart Card is fully inserted into the receiver front panel slot.
ERROR message text: "Smart Card not inserted correctly."	Smart card is inserted upside down or backwards.	Check that the Smart Card is inserted right side up, with the picture on top and the arrow facing in the correct direction.
ERROR message text: "The Smart Card currently inserted is not valid for use with this receiver."	The receiver will work <i>only</i> with the Smart Card that came with it.	Insert the Smart Card that came with the system.
ATTENTION: Your Smart Card does not currently have authorization to view or purchase this program. Please wait or channel up or down.	There is a problem with the <b>Program Guide</b> information transmitted to the receiver via the satellite signal.	You cannot watch the selected program, even though it is displayed in the <b>Program Guide</b> . Try a different program or channel.
ERROR: "Your receiver has not yet been authorized."	The receiver has not yet been electronically linked with the Smart Card, via the satellite signal.	If you have authorized your system, wait a few minutes to see if the message is removed. If you have not authorized your system, call Bell Express Vu Customer Service Call Centre for assistance.
ATTENTION: "Acquiring satellite signal."	The receiver may have just been plugged in. If so, it is acquiring the satellite signal. The satellite dish may have moved so that it is no longer picking up the satellite signal. The coaxial cables may have loosened or have moisture inside. There may be an interruption of the satellite signal.	Wait a few minutes to see if the message is removed. Check that the <b>Signal Strength</b> bar in the <b>Point Dish and Signal Strength</b> menu is <i>green</i> and displays the word "Locked." If not, contact your installer to re-aim the satellite dish.

### Reference Problems and Solutions Tables



### **USING THE REMOTE CONTROL**

What is Happening	Possible Reasons Why	What to Do
You cannot find the remote control.	N/A	Use the receiver front panel <b>Control Buttons</b> to control the receiver until you find the remote. If the remote control is permanently lost or too damaged to use, call Bell ExpressVu Customer Service Call Centre to order a replacement.
When you press a button on the remote control, the receiver does not do what you expect.	The remote control may be missing batteries, the batteries may be incorrectly placed in the remote, or the batteries may be weak or dead.	If the batteries are missing or dead, insert fresh AAA-size batteries. If the remote has fresh batteries, check whether they are placed according to the label diagram. If not, remove them and place correctly.
When you press the remote control <b>POWER</b> button to turn the receiver ON, the receiver front panel <b>POWER</b> light does not light up.	The batteries may be weak or dead. The receiver power cord may not be plugged into a power outlet, or there may be a problem with the power.	Try other remote control buttons to see if the receiver is responding. Replace the remote batteries with fresh ones.  Check that the receiver power cord is not damaged and that the plug is inserted correctly into the outlet.
You use infrared (IR) remote control extenders (called "pyramids"). Other electronic devices exhibit ultra-high frequency (UHF) interference.	The extenders use UHF signals to transmit signals from one room of the building to another.  These signals may be causing the interference.	Temporarily stop using the extenders, to see whether this eliminates the interference. If the extenders are the source of the interference, you will have to avoid using them whenever you do not want interference with other devices that use UHF. This is because UHF signals have a long range and go through walls and other solid objects.
You use infrared (IR) remote control extenders (called "pyramids"). The IR remote control extenders do not seem to work.	The IR sensor on the extender that receives the remote control signals may not be facing the remote control. The IR cable on the extender that sends the signal to the receiver may not be right in front of the IR sensor on the receiver front panel.	Make sure that the extender that receives the signal from the remote control is facing the right way, so that the IR sensor can receive the remote control signals.  Make sure that the IR cable on the extender that sends the signal to the receiver is right in front of the IR sensor on the receiver front panel, so that the receiver IR sensor can receive the signals.  If doing the above does not solve the problem, contact the manufacturer of the extenders for assistance.

### **HEARING PROGRAM SOUND**

What is Happening	Possible Reasons Why	What to Do
The receiver front panel Power light is on and there is a good picture on the TV set, but you do not hear any sound.	You may have muted the sound, or set the volume so low that you cannot hear it. The audio connections may not be properly connected.	Check the volume level on the TV or audio equipment. Turn off the mute or turn up the volume, as required. Check the audio connectors and cables from the receiver to the TV or the sound system you are using. Check the TV speakers or the sound system you are using.
You hear a foreign language with a program.	You may have programmed the receiver to select an alternate audio language.	Use the <b>System Setup</b> menu to open the <b>Alternate Audio</b> menu, where you can select the language you prefer.

### **WATCHING A PROGRAM**

What is Happening	Possible Reasons Why	What to Do
The receiver front panel Power light is on, but the TV image:     is black (no picture),     is frozen,     has breakups,     has "snow," or     shows small squares of     various colours.	The TV set may not be working properly.  If the TV and the receiver are working properly, there may be interference with the satellite signal. The TV may be wired to the wrong input.	Make sure that the TV set is plugged into an electrical outlet. Make sure the outlet has electrical power. Make sure that the TV is turned on. If the receiver is connected to the TV using only the RF or VHF connections, make sure that the TV is tuned to channel 3 or 4 (whichever works best in your area) and that the modulator output is set to the same channel as the TV.  Make sure that the TV brightness and contrast are adjusted correctly.  Make sure that the TV is connected properly to the receiver.  Check that the system has been installed correctly. Make sure that all required coaxial cables are in place, and check that all cable connectors are firmly connected.  Make sure that the satellite dish is aimed at the satellite. Check the strength of the signal using the Point Dish and Signal Strength menu.  Consult your installer to re-aim the dish, if necessary, to obtain the maximum possible signal strength.  Note the local weather conditions. Heavy rain, snow, or cloud cover may be interfering with transmission of the satellite signal. Remove any snow or other debris which may have collected on the satellite dish. Set the TV to SVIDEO or VIDEO input.

### Reference Problems and Solutions Tables



The receiver front panel Power light is on, and there is a picture on the TV screen, but the picture: has sparkles or is grainy, has a herringbone pattern, lacks colour or vertical hold, or wobbles, or looks "washed out" or fuzzy.	The TV set may not be working properly. If the receiver is connected to the TV using only the RF or VHF connections, there may be a strong local broadcast on the same channel, or a channel adjacent to the one to which the TV is tuned. There may be interference from other nearby electrical devices (such as cellular telephones, computers, microwave ovens, radios, stereos, or TVs). The satellite dish may have moved, so that it no longer picks up the satellite signal.	Make sure that the TV brightness and contrast are adjusted correctly, and that the TV is working properly.  Make sure that the TV is connected properly to the receiver.  Check other nearby electrical devices as possible sources of interference. Check that all required coaxial cables are in place. Check for moisture or water leaking in all connections. Dry them out if needed, then seal them with coaxial cable sealant. Check the dish-to-receiver cable run length; if it is over 30m, call your dealer or professional installer. Make sure that the satellite dish is aimed at the satellite. Check the strength of the signal using the Point Dish and Signal Strength menu. If necessary, contact your installer to re-aim the dish to obtain the maximum possible signal strength. Check the dish mount, tightening the bolts if needed.
A "black box" fills almost all of the TV screen.	You may have activated the Close Caption feature on the TV, and put that feature into Text mode.	Using the TV remote control and/or menus displayed by the TV ( <i>not</i> the receiver remote control or the menus displayed by the receiver), deactivate the Close Caption feature.
The TV screen is all blue.	You may have connected the receiver to an incorrect input connection on the TV for the signal output from the receiver.	Check your TV owner's manual for the correct TV input connection to use for the signal output from the receiver.

### **USING THE MENUS**

What is Happening	Possible Reasons Why		What to Do
You were using a menu, and it suddenly closed, taking you back to the program you were watching.	The menus have a time-out feature that closes any menu after several minutes of no activity. This will discard any changes you have made, but otherwise does no harm to the receiver.	Start over again.	

### USING THE PROGRAM GUIDE OR THE BROWSE BANNER

What is Happening	Possible Reasons Why	What to Do
You try to display future programs in the <b>Program Guide</b> or <b>Browse Banner</b> , but find you cannot.	The Program Guide and Browse Banner can display programs scheduled for an extended, but not unlimited time beyond the present.	Try displaying the Program Guide again later. By that time, it may show programs for the time and date you want.
You try to display past programs (programs that have ended) in the <b>Program Guide</b> or <b>Browse Banner</b> , but find you cannot.	The <b>Program Guide</b> and <b>Browse Banner</b> can display <i>only</i> programs that have <i>not</i> yet ended. These features <i>cannot</i> display a time earlier than the present.	Contact the program providers for information on past programs.
When you are using the <b>Program Guide</b> or <b>Browse Banner</b> , some channels are missing.	You have activated a Favourites List other than the list named ALL CHAN.	You can change the active Favourites List while using the <b>Program Guide</b> , by pressing the remote control <b>GUIDE</b> button. You can choose another custom Favourites List or the <b>ALL CHAN</b> list, which includes all the channels.

### **CHANGING CHANNELS**

What is Happening	Possible Reasons Why	What to Do
You enter a desired channel number. The channel changes, but the new channel is not exactly the channel you entered. You are scanning up or down through the channels, and the receiver is skipping channels that you know you have purchased.	You may have made a mistake entering the channel number, or the channel number you entered may be invalid. If so, the channel displayed is the closest possible to the channel you entered. If you were watching a program and entered the number for a channel that you have not purchased, the receiver will change to the unpurchased program and allow a purchase or display a message. If a Favourites List other than ALL CHAN is active, the receiver will skip channels not on the active list.	Carefully retry entering the channel number you want.  Press the remote control RECALL button to return to the previous channel number. Select ALL CHAN as the active Favourites List.

### **USING FAVOURITES LISTS**

What is Happening	Possible Reasons Why	What to Do
You try to change the ALL CHAN list. The receiver displays an ERROR message.	The receiver will not allow you to change the ALL CHAN list.	Choose another list to change.
You try to make an empty Favourites List active. The receiver highlights the Modify List option.	The receiver will not allow you to activate an empty list.	Choose another list to use, or add at least one channel to the empty list.
You try to add a channel to a Favourites List. The receiver displays an ERROR message.	The list is full (that is, it has the maximum number of channels allowed in it).	You <i>must</i> delete a channel from the list to make room for each new channel.

### Reference Problems and Solutions Tables



### **SETTING AND USING SECURITY LOCKS**

What is Happening	Possible Reasons Why	What to Do
You set a lock (for example, a lock on programs by ratings), but the lock does not take effect.	You have not locked the receiver.	You <i>must</i> lock the receiver for any lock to take effect.
You forgot your password, so that you are unable to unlock the receiver.	You may not have written down the password, to keep it in a safe place.	Call Bell ExpressVu Customer Service Call Centre. You must provide the following information:(1) your name; (2) your address; 3) your telephone number; (4) the receiver serial identification number; and (5) your Bell ExpressVu Customer Service Call Centre Personal Identification Number (PIN), if you use one.

### **ORDERING A PAY PER VIEW PROGRAM**

What is Happening	Possible Reasons Why	What to Do
Someone orders a pay per view program without your permission.	You may have been away from the receiver, and someone else used it.	Lock the receiver to prevent unauthorized pay per view purchases. <b>Note:</b> You do not have to set any locks to lock pay per view purchases. Locking the receiver automatically locks pay per view purchases. Remember that you are responsible for all pay per view purchases, whether or not you authorize such purchases. If you lock the receiver, then anyone who wants to order a pay per view program must enter the password.
You are not able to order a pay per view program.	The receiver may not be connected to an active telephone line.  The Smart Card credit limit may have been exceeded.	The receiver <i>must</i> be connected at <i>all</i> times to an active telephone connection. If you install two or more receivers, each receiver <i>must</i> be connected at <i>all</i> times to an active telephone connection. Call Bell ExpressVu Customer Service Call Centre.
You find that you are not able to cancel a pay per view program.	You ordered a pay per view program, and then decided not to watch it.	You cannot cancel an order for a pay per view program, whether it was just ordered or ordered previously.
Your setup includes more than one receiver. You order a pay per view program, but it does not appear via all of the receivers.	You ordered a pay per view program, and want it to be available via all the receivers in your setup.	If you use more than one receiver, you <i>must</i> order a pay per view program for each receiver.

### USING THE TELEPHONE FOR VOICE/DATA/FAX

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What is Happening	Possible Reasons Why	what to bo
During a telephone call, you hear "clicks."	The receiver may have tried to call Bell ExpressVu Customer Service Call Centre in order to send pay per view purchase information. When the receiver found that the telephone was busy, it automatically disconnected.	You do not have to do anything. The receiver <i>must</i> be connected at <i>all</i> times to an active telephone connection. If you install two or more receivers, each receiver <i>must</i> be connected at <i>all</i> times to an active telephone connection. Call Bell Express Vu Customer Service Call Centre.
You pick up the telephone to make a call, but you do not hear a dial tone.	The receiver was calling Bell ExpressVu Customer Service Call Centre in order to send pay per view information. When the receiver found that the telephone was picked up, it automatically disconnected.	Press the telephone receiver button to hang up. Release the button to get a dial tone.
Your computer or FAX machine tries to send a FAX or modem transmission, but fails.	The receiver was calling Bell ExpressVu Customer Service Call Centre in order to send pay per view information. When the receiver found that a call was being made on the telephone, it automatically disconnected. The FAX or modem found that there was no dial tone, and canceled the transmission.	Resend the FAX or modem transmission.
Your computer or FAX machine was receiving a FAX or modem transmission, but an error occurred.	The receiver may have tried to call Bell ExpressVu Customer Service Call Centre in order to send pay per view purchase information during the FAX or mode call. When the receiver found that the telephone was busy, it automatically disconnected. This generated "clicks" that caused an error in the FAX or modem transmission.	Have the sender resend the FAX or modem transmission.

### Reference Problems and Solutions Tables



### **USING EVENT TIMERS**

What is Happening	Possible Reasons Why	What to Do
You try to set up an event timer and the receiver displays a message noting that the program is locked.	You <i>must</i> enter the password <i>before</i> you can create an event timer for a locked program.	To be able to set up an event timer for the program, first enter the password.
You try to set up an event timer and the receiver displays a message noting that the program is a pay per view event.	You <i>must</i> order a pay per view event <i>before</i> you can create an event timer for it.	To be able to set up an event timer for the event, first order it.
You try to set up an event timer, but the receiver displays an <b>Error</b> message giving you the option to delete an event timer that was set up earlier.	You already have set up the maximum number of event timers.	To be able to set up a new event timer, delete one of the event timers you set up earlier.
You set up an event timer, but the receiver does not tune to the channel of the program, or does not record the program.	You may have set up a Reminder Event Timer but what you should have set up is an Auto-Tune Event Timer, or a VCR Event Timer.	Remember that a <i>Reminder Event Timer</i> just reminds you that the program is about to start. An <i>Auto-Tune Event Timer</i> reminds you and tunes the receiver to the channel of the program. A <i>VCR Event Timer</i> reminds you, tunes the receiver, and starts the VCR.
You set up an event timer for a program that is repeated (such as a regularly scheduled program), but the timer does not operate for a showing of the program.	You may have set up a timer with an incorrect frequency.	Remember that a Once event timer operates just one time. A <i>Mon-Fri</i> . event timer operates Monday through Friday on the same channel at the same time. A <i>Daily</i> event timer does the same, Monday through Sunday. A <i>Weekly</i> event timer operates once a week on the same channel at the same time.
You set up an event timer, but the timer does not operate at all.	The program time may have changed so that the event timer overlapped another event timer. The program time may have changed by more than twenty-four hours.	If the receiver is ON and finds and event timer overlap, it will display the <b>Event Timer Scheduling Conflict</b> menu. You <i>must</i> edit or delete one of the overlapping event timers. No event timer will operate if the program time changes by more than twenty-four hours.
You set up a <i>Once</i> event timer, but the timer operates at a time different from what you expect.	The program time changed.	A <i>Once</i> event timer always operates at the actual time of the program.
You stop the operation of an event timer for one showing of a program that is repeated (such as a regularly scheduled program), but the timer operates for the next showing.	Stopping the event timer applies <i>only</i> to the current showing of the program.	To stop all operations of a repeated event timer, you <i>must</i> delete the event timer. <b>Note:</b> The receiver deletes a <i>Once</i> event timer when it operates.
You are testing a VCR code to see if the receiver controls a VCR. The VCR does not do the test.	The VCR may not be turned ON, there may not be a tape inserted, the tape may not be rewound, or the write-protect tab on the tape may have been removed.  The code you are testing may not be valid for the VCR.	Make sure the VCR is turned ON, with a blank tape inserted on which you want to record, that the tape is rewound, and that the write-protect tab on the tape is intact.  Try another VCR code from the table.

### User Guide

What is Happening	Possible Reasons Why	What to Do
You set up a VCR Event Timer, but the VCR does not record the program you want.	You may not have turned the VCR ON, inserted a tape, or rewound the tape. Or, the write-protect tab on the tape may have been removed.  If you use the receiver back panel RF of VHF connections in the wiring setup, you may not have set the receiver channel 3/4 setting and both the VCR modulator output and viewing channel to either 3 or 4.  There may be obstacles between the receiver and the VCR. If you set up the VCR Event Timer using the Create an Event Timer menu, you may have selected an Auto-Time, or Reminder, instead of a VCR timer. If you did select a VCR timer, you may have selected an inappropriate timer frequency. If you set up the VCR Event Timer using the quick record feature, the timer was one-time only, and may have missed another showing of the program.	Make sure the VCR is ON, with a tape inserted on which you want to record, that the tape is rewound, and that the write-protect tab on the tape is intact.  If you use the RF of VHF connections, you must set the receiver channel 3/4 setting and both the VCR modulator output and viewing channel to either 3 or 4.  Remove any obstacles between the receiver and the VCR.  When you set up a VCR Event Timer, make sure to select the VCR option in the Timer Type list on the Create an Event Timer menu. Also, make sure to select the proper option in the Timer Frequency list on this menu.  Remember that you can set up a Once (one-time only) timer using the quick record feature.
You edit an <i>automatic</i> event timer. The timer does not start or does not end according to the program for which you set the timer.	Editing an <i>automatic</i> event timer <i>converts</i> it to a <i>manual</i> event timer. Such a timer starts and stops at the times you specify, <i>not</i> the start and stop times of any specific program.	If you want an <i>automatic</i> event timer to start and stop according to a specific program, avoid editing that event timer.
You try to set up a <i>manual</i> event timer. The receiver displays an <b>Error</b> message.	You may have tried to set a <i>manual</i> event timer with invalid start or stop times.	Review the rules on start and stop times for <i>manual</i> event timers.
The receiver does not display the program name for a <i>manual</i> event timer.	The receiver may not be able to display a program name for a <i>manual</i> event timer.	Use the <b>Program Guide</b> or a printed schedule to find the program name.
You set an event timer. The event timer misses the beginning or the end of a program.	The program may have started a little earlier than scheduled, or it may have run over its scheduled ending time.	Use the <b>Start 1 min. early</b> option to start any event timer one minute early, except for a pay per view event. Use a manual event timer to start any event timer at the times you set yourself, except for a pay per view event.

### Codes



### **DEVICE CODES FOR PROGRAMMING THE REMOTE**

These tables contain the manufacturer codes for programming the remote to control your TV, VCR, DVD player, or audio amplifier. Every attempt has been made to include all codes. If your device brand is not listed or if the codes do not work, the remote may not control your device. In some cases codes may operate some but not all buttons shown in this guide.

### TV Codes

Programming in AUX mode: Press 0 before entering the TV code

Programming in Press 0 before en	AUX mode: tering the TV code.
A Mark	670
Action	662
Admiral	514, 521, 605, 668, 669, 675
Aiko	727
Aiwa	751
Akai	570, 573, 659, 660
A-Mark	620
Amtron	657
Anam National	509, 541, 620, 651,
7 a la 11 i la	657, 661, 663, 698
AOC	505, 506, 519, 520, 573, 620,
7.00	627, 652, 653, 654, 659, 664,
	665, 670, 672
Apex	743, 744, 745
Archer	620
Audiovox	620, 657, 662, 672
Bell & Howell	590, 669, 675
Broksonic	752, 659, 661, 748
Capehart	519, 627
Citizen	506, 516, 523, 524, 525, 526,
GIGLOTT	590, 652, 654, 657, 658, 680,
	727
Classic	659
Colortyme	573, 627, 652, 654, 660, 667,
Ooloityiiic	668, 671, 674, 679, 681
Contec/Cony	541, 655, 657, 661, 662, 726
Craig	536, 541, 657, 661, 662, 666,
Olaly	667, 694
Crown	506 526 657 666 670
Curtis Mathes	526, 536, 657, 666, 670
Out us iviau ics	506, 516, 526, 573, 590, 641,
	645, 650, 652, 654, 658, 659, 660, 664, 665, 667, 668, 670,
Daewoo	674, 680, 703, 708 505, 524, 526, 529, 530, 531,
Daewoo	500, 524, 520, 529, 550, 551, E72 CE2 CE2 CE4 CE0 CE0
	573, 652, 653, 654, 658, 659,
	663, 664, 665, 670, 672, 674,
Daytron	684, 698, 719, 727 526, 627, 652, 654, 658, 665,
Daytion	670, 672
Dimensia	645, 650
DISH Network	742
Dixi	566, 620
Dumont	501, 627, 652
Echostar	722
Electrohome	526, 573, 651, 652, 654, 656,
LIOUUUIUIIU	659, 660, 665, 670, 709, 728
Emerson	526, 534, 535, 536, 537, 538,
LITEROUTE	520, 504, 500, 500, 507, 500, 530, 541, 572, 500, 627, 626
	539, 541, 573, 590, 627, 636, 642, 648, 652, 654, 655, 657,
	658, 659, 660, 661, 662, 665,
	666, 667, 669, 670, 677, 679, 682, 692, 696, 699, 720
Envision	506, 572, 652, 664, 660, 664
Fisher	506, 573, 652, 654, 660, 664 542, 590, 683 534, 682, 694
	534 682 604
Fujitsu	524 541 657 661 662 677
Funai	534, 541, 657, 661, 662, 677,
GE	682, 694 508, 509, 543, 544, 630, 645,
UL	
	646, 650, 651, 652, 654, 659,
	661, 663, 665, 667, 668, 670,
	673, 676, 681, 690, 691, 698,
Caldatas	701, 715, 716, 725, 728, 742
Goldstar	505, 523, 526, 545, 546, 566,
	573, 652, 653, 654, 655, 656,
	658, 659, 660, 664, 665, 670,
One disease	671, 678, 693, 730, 747
Gradiente	660, 671

Granada	627, 670, 671
Grundig	670, 673
Hallmark	627, 652, 654, 659
Harman Kardon	561, 659
Hinari	534
Hitachi	523, 526, 548, 549, 553, 55
	555, 585, 597, 626, 636, 63
	643, 648, 652, 654, 655, 66
	668, 669, 670, 672, 673, 70
	718, 726
Infinit :	
Infinity	666, 671
JBL	566, 671
JC Penney	505, 506, 516, 525, 526, 54
•	546, 631, 645, 646, 650, 65
	653, 654, 658, 659, 664, 66
	668, 670, 673, 676, 678, 68
	690, 691, 701, 725, 726, 72
	730
Jensen	556, 573, 652, 654, 660
JVC	508, 557, 559, 642, 649, 65
	667, 673, 676, 726, 735, 73
	737
Kawasho	548, 561, 573, 652, 654, 66
Kenwood	506, 573, 652, 654, 656, 65
	660, 664, 679, 681
Kloss Novabeam	657, 663, 698, 723, 724
Konka	753
KTV	526, 539, 541, 573, 657, 65
	661, 662, 664, 665, 670, 69
Lloyds	627, 679
Loewe	566
Logik	675
Luxman	523, 652, 654,
LXI	563, 566, 590, 595, 667, 63
	635, 645, 646, 650, 654, 65
	668, 678, 683, 691, 701, 72
Magnasonic	573, 659, 660, 669, 672, 67
Magnavox	506, 520, 525, 536, 566, 56
	568, 573, 610, 652, 654, 65
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Runco Sampo Samsung Sansui Sanyo	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 663
Runco Sampo Samsung Sansui	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 668, 669, 670, 679, 680, 704, 717, 730, 738 754
Runco Sampo Samsung Sansui Sanyo SBR	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566
Runco Sampo Samsung Sansui Sanyo SBR Schneider	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566
Runco Sampo Samsung Sansui Sanyo SBR	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652,
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Runco Sampo Samsung Sansui Sanyo SBR Schneider	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652, 654, 655, 657, 667, 669, 600, 602, 665, 677, 677, 682, 665, 657, 667, 682, 665, 677, 687, 682, 665, 677, 682, 696, 701 523, 534, 542, 563, 590, 595.
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652, 654, 655, 657, 667, 668, 606, 670, 573, 583, 584, 585, 657, 661, 662, 665, 670, 677, 682, 696, 701 523, 534, 542, 563, 590, 595, 601, 604, 617, 627, 631, 635,
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 662, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 526, 534, 537, 541, 600, 652, 654, 655, 657, 661, 662, 665, 670, 677, 682, 696, 701 523, 534, 542, 563, 590, 595, 501, 504, 617, 627, 631, 635, 645, 646, 650, 652, 654, 655, 645, 656, 664, 665, 664, 666, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 666, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 666, 665, 664, 665, 664, 666, 664, 666, 664, 666, 664, 666, 664, 6
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Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 668, 73, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652, 654, 656, 667, 661, 666, 667, 689, 670, 679, 680, 704, 717, 780, 788, 784, 784, 784, 784, 784, 784, 784
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears	681, 691, 698, 701, 708, 715, 716, 725, 742, 749  590, 645  501  506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746  505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 669, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738  754  542, 590, 652, 683  566  566  566, 567, 669, 669, 662, 665, 6670, 679, 680, 700, 704, 717, 730, 738  754  542, 590, 652, 683  566  566  566, 534, 537, 541, 600, 652, 654, 656, 670, 677, 682, 696, 701  523, 534, 542, 563, 590, 595, 601, 604, 617, 627, 631, 635, 645, 646, 650, 652, 664, 656, 655, 667, 662, 665, 667, 667, 668, 670, 672, 654, 656, 655, 667, 662, 665, 667, 662, 665, 667, 662, 665, 667, 662, 665, 667, 667, 668, 670, 682, 664, 650, 652, 654, 656, 655, 667, 668, 670, 682, 683, 688, 691, 703, 725, 726, 688, 691, 703, 725, 726, 688, 691, 703, 725, 726, 780, 780, 780, 780, 780, 780, 780, 780
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 700, 779, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652, 654, 655, 657, 661, 662, 665, 701 523, 534, 537, 541, 600, 652, 654, 656, 669, 661, 668, 670, 677, 682, 683, 645, 646, 650, 652, 654, 656, 659, 661, 668, 670, 682, 683, 691, 703, 725, 726 521, 526, 585, 607, 682, 683, 688, 691, 703, 725, 725, 526, 585, 607, 682, 683, 688, 691, 703, 725, 725, 526, 585, 605, 607, 682, 683, 691, 703, 725, 725, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 726, 521, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 725, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 725, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 725, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 726, 521, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 726, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 726, 526, 585, 605, 607, 628, 681, 688, 691, 703, 725, 726, 526, 585, 605, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 703, 725, 726, 526, 585, 605, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 703, 725, 726, 526, 585, 605, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 688, 691, 607, 628, 681, 681, 681, 681, 681, 681, 681, 68
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Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 668, 667, 661, 662, 667, 661, 662, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683, 583, 684, 685, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 567, 661, 662, 665, 665, 667, 661, 662, 665, 667, 661, 662, 665, 667, 661, 662, 665, 667, 671, 677, 682, 696, 701, 677, 682, 696, 701, 679, 680, 689, 661, 668, 669, 661, 668, 670, 662, 664, 656, 659, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 607, 628, 669, 670, 682, 684, 669, 667, 688, 669, 667, 688, 699, 670, 672, 688, 699, 670, 682, 684, 686, 669, 661, 668, 670, 682, 684, 686, 699, 661, 688, 670, 682, 683, 689, 670, 682, 684, 686, 699, 667, 688, 669, 667, 688, 669, 677, 674, 679, 739, 740, 741
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 526, 534, 537, 541, 600, 652, 654, 656, 667, 667, 689, 670 1004, 677, 682, 696, 701 523, 534, 542, 563, 590, 595, 601, 662, 665, 676, 687, 688, 691, 703, 725, 726 521, 526, 535, 656, 667, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 605, 607, 628, 662, 659, 655, 658, 607, 628, 683, 699, 652, 654, 656, 659, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears Sharp	681, 691, 698, 701, 708, 715, 716, 725, 742, 749  590, 645  501  506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746  505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738  754  542, 590, 652, 683  566  566  526, 534, 537, 541, 600, 652, 654, 655, 657, 661, 662, 665, 670, 677, 682, 684, 680, 689, 670, 672, 683, 584, 586, 586, 662, 665, 667, 689, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726  521, 526, 588, 605, 607, 628, 629, 652, 654, 656, 663, 670, 682, 683, 689, 670, 682, 683, 688, 691, 703, 725, 726  521, 526, 588, 605, 607, 628, 629, 652, 654, 656, 670, 672, 682, 685, 607, 682, 683, 689, 670, 682, 684, 650, 655, 665, 669, 670, 674, 679, 739, 730, 741, 741  675
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears Sharp	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 567 567, 677, 682, 696, 701 523, 534, 542, 560, 561, 662, 665, 670, 677, 682, 696, 701 523, 534, 542, 560, 590, 595, 601, 604, 617, 627, 631, 635, 645, 646, 650, 652, 654, 656, 659, 661, 668, 670, 677, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 605, 607, 628, 683, 689, 670, 674, 679, 739, 740, 741 675 675
Runco Sampo Samsung Sansui Saryo SBR Schneider Scott Sears Sharp Signature Solavox Sony	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746 505, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 526, 534, 537, 541, 600, 652, 654, 656, 667, 667, 661, 662, 665, 667, 667, 689, 670, 677, 679, 680, 704, 717, 730, 738 566 566 526, 534, 537, 541, 600, 652, 654, 655, 657, 661, 662, 665, 670, 677, 682, 696, 701 523, 534, 542, 563, 590, 595, 601, 604, 617, 627, 631, 635, 645, 646, 650, 652, 654, 656, 659, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 607, 682, 683, 669, 670, 674, 679, 739, 740, 741, 675 612 500, 578, 640, 670, 690
Runco Sampo Samsung Sansui Sanyo SBR Schneider Scott Sears Sharp	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 668, 667, 651, 652, 654, 656, 668, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 654, 658, 669, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 566, 667, 669, 670, 679, 680, 704, 717, 780, 781, 682, 696, 670, 677, 682, 696, 701, 677, 682, 696, 701, 677, 682, 696, 701, 678, 688, 691, 703, 725, 726 521, 526, 585, 657, 661, 662, 665, 669, 661, 668, 670, 667, 688, 691, 703, 725, 726 521, 526, 585, 655, 657, 661, 668, 669, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 655, 667, 628, 669, 670, 674, 679, 739, 740, 741 675 612 500, 578, 640, 670, 690 525, 536, 541, 627, 652, 654,
Runco Sampo Samsung Sansui Sanyo Sansui Sanyo SBR Schneider Scott Sears Sharp Signature Solavox Sony Soundesign	681, 691, 698, 701, 708, 715, 716, 725, 742, 749  590, 645  501  506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746, 750, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738  754  542, 590, 652, 683  566  566  526, 534, 537, 541, 600, 652, 654, 656, 657, 667, 668, 667, 669, 661, 662, 665, 670, 677, 682, 684, 685, 655, 657, 681, 682, 665, 667, 689, 661, 668, 670, 682, 683, 683, 681, 703, 725, 726  521, 526, 584, 655, 655, 661, 668, 690, 670, 674, 679, 739, 740, 741  675  612  500, 578, 640, 670, 690  5252, 536, 541, 627, 652, 654, 656, 619, 675, 678, 640, 670, 678, 679, 739, 740, 741  675  612
Runco Sampo Samsung Sansui Saryo SBR Schneider Scott Sears Sharp Signature Solavox Sony	681, 691, 698, 701, 708, 715, 716, 725, 742, 749 590, 645 501 506, 519, 652, 654, 658, 663, 664, 665, 668, 667, 651, 652, 654, 656, 668, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 654, 658, 669, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738 754 542, 590, 652, 683 566 566 566, 667, 669, 670, 679, 680, 704, 717, 780, 781, 682, 696, 670, 677, 682, 696, 701, 677, 682, 696, 701, 677, 682, 696, 701, 678, 688, 691, 703, 725, 726 521, 526, 585, 657, 661, 662, 665, 669, 661, 668, 670, 667, 688, 691, 703, 725, 726 521, 526, 585, 655, 657, 661, 668, 669, 661, 668, 670, 682, 683, 688, 691, 703, 725, 726 521, 526, 585, 655, 667, 628, 669, 670, 674, 679, 739, 740, 741 675 612 500, 578, 640, 670, 690 525, 536, 541, 627, 652, 654,
Runco Sampo Samsung Sansui Sanyo Sansui Sanyo SBR Schneider Scott Sears Sharp Signature Solavox Sony Soundesign	681, 691, 698, 701, 708, 715, 716, 725, 742, 749  590, 645  501  506, 519, 652, 654, 658, 663, 664, 665, 698, 730, 746, 750, 506, 516, 523, 526, 566, 573, 612, 627, 647, 652, 653, 654, 655, 656, 658, 659, 664, 665, 667, 669, 670, 679, 680, 704, 717, 730, 738  754  542, 590, 652, 683  566  566  526, 534, 537, 541, 600, 652, 654, 656, 657, 667, 668, 667, 669, 661, 662, 665, 670, 677, 682, 684, 685, 655, 657, 681, 682, 665, 667, 689, 661, 668, 670, 682, 683, 683, 681, 703, 725, 726  521, 526, 584, 655, 655, 661, 668, 690, 670, 674, 679, 739, 740, 741  675  612  500, 578, 640, 670, 690  5252, 536, 541, 627, 652, 654, 656, 619, 675, 678, 640, 670, 678, 679, 739, 740, 741  675  612

### **DEVICE CODES FOR PROGRAMMING THE REMOTE**

678 588

588

Fuji Funai

Garrard

	573, 600, 610, 652, 654, 656,
	659, 660, 664, 665, 666, 671,
	672, 674, 677, 723, 724, 729,
	733
Symphonic	632, 657, 662, 677, 692, 694
Tandy	521, 605
Tatung	509, 651, 663, 698,
Technics	508, 673, 676
Techwood	523, 573, 652, 654, 660, 676
Teknika	504, 505, 512, 516, 523, 524,
	525, 526, 534, 536, 541, 573,
	644, 652, 653, 654, 655, 657,
	658, 661, 662, 664, 665, 666,
	670, 672, 675, 680, 681, 682,
	685, 726, 727
Telefunken	679
Toshiba	516, 590, 617, 631, 635, 667,
	678, 680, 683, 688, 750
Totevision	526, 658, 668
Ultra	672
Universal	543, 690
Vector Research	506
Video Concepts	570, 661
Wards	536, 573, 607, 645, 650, 652,
	653, 654, 656, 659, 664, 665,
	666, 667, 668, 669, 674, 675,
	677, 678, 682, 690, 715, 723,
	724, 729
White Westinghouse	659, 664, 670, 672, 674
Yamaha	505, 506, 573, 652, 653, 654,
	656, 664, 666, 672, 679,

### **VCR Codes**

Programming in AUX mode: Press 1 before entering the VCR code.

Aiwa	588, 622, 623
Akai	513, 514, 515, 516, 517, 518,
	520, 568, 682
Alba	546
Amstrad	588
ASA	556
Audiovox	676
Bell & Howell	581
Broksonic	559, 748
Bush	589
Calix	676
Canon	554, 678, 679
Capehart	546
CCE	681
Citizen	534, 591, 592, 594, 675, 676,
	677, 684
Colortyme	592,
Craig	591, 658, 675, 676, 681, 685,
· ·	687, 688
Curtis Mathes	554, 592, 594, 605, 607, 675,
	677, 678, 679, 683, 684
Daewoo	506, 534, 546, 547, 559, 588,
	684
Daytron	546
Denon	686
Dimensia	607
Dumont	549
Electrohome	512, 676, 687
Emerson	505, 506, 508, 509, 511, 512,
	534, 559, 568, 588, 590, 618,
	676, 678, 684, 687
Finlandia	549
Finlux	549, 556, 588
Fisher	548, 549, 581, 584, 588, 608,
	610, 684, 688

Garraro	588
GE	550, 551, 552, 554, 572, 591,
	605, 607, 675, 678, 679
Go Video	557 558 620 685
	557, 558, 620, 685 592, 594, 676, 687, 747
Goldstar	592, 594, 676, 687, 747
Goodmans	585, 589
Gradiente	588, 687
Granada	549, 581
Grundig	556
Harman Kardon	
Hannan	601
	681
Hinari	589
Hitachi	536, 538, 539, 540, 588, 595,
	597, 680, 682, 686
IΠ	518
JC Penney	554, 581, 591, 592, 594, 595,
00 1 0111103	600, 674, 675, 676, 678, 679,
	680, 681, 685, 686, 687
Jensen	595, 680, 682
JVC	561, 562, 563, 581, 592, 594,
	600, 674, 682, 686
Kenwood	562, 581, 592, 594, 600, 674,
	677, 682, 683
KLH	681
Kodak	676, 678
Lloyds	683, 688
Logik	589, 681, 685
Luxor	518
LXI	676
Magnasonic	685, 687
	507 500 554 55C 670 670
Magnavox	327, 333, 334, 330, 676, 679,
	527, 533, 554, 556, 678, 679, 684, 685
Marantz	554, 556, 581, 585, 592, 594,
	600, 602, 674, 677, 678, 683
Matsushita	678
Memorex	507, 533, 549, 554, 566, 581,
onioron	585, 588, 608, 675, 676, 678,
	606 607 600
MOA	686, 687, 688
MGA	512, 567, 568
Minolta	595, 680, 686
Mitsubishi	512, 562, 567, 568, 570, 571,
	595, 680, 687
Motorola	678
MTC	
Multitech	579, 588, 675, 677, 681
NAD	573
NEC	562, 581, 592, 594, 600, 602,
	674, 677, 682, 683
Nikko	676
Noblex	675
Olympus	678
	676, 687
Optimus Optimus	010,001
Optonica	585
Orion	506, 684, 687
Panasonic	523, 554, 598, 614, 628, 633,
	678, 679, 684, 685, 688, 747
Pentax	592 595 677 680 683 686
Pentex Research	594
Dordio	588
Perdio	
Philco	554, 678, 679, 686
Philips	554, 556, 585, 678, 684
Pioneer	562, 573, 574, 575, 576, 600,
	674, 680
Portland	546 677
Process	546, 677 605, 607
Proscan	605, 607
Proscan Proton	605, 607 685
Proscan	605, 607

Radio Shack/Realistic	581, 584, 588, 608, 675, 676,
	678, 679
Radix	676
RCA	518, 525, 527, 528, 591, 595,
	605, 607, 615, 631, 649, 675,
	678, 680, 686
Realistic	534, 549, 554, 581, 584, 585,
	588, 608, 675, 678, 679, 687,
	688
Ricoh	502
Runco	533
Saisho	506
Salora	567, 581
Samsung	515, 517, 534, 579, 591, 675
Sansui	544, 562, 600, 674, 682, 685
Sanyo	549, 581, 582, 583, 608, 675,
curiyo	688
SBR	556
Schneider	589
Scott	508, 534, 559, 590, 684, 687
Sears	548, 549, 581, 584, 595, 608,
Oouro	610, 676, 678, 680, 683, 684,
	686, 687, 688
Sentra	546
Sharp	512, 585, 607, 625
Shintom	589, 595, 681, 685
Singer	678, 681, 685
Sony	500, 501, 502, 504
STS	678
Sylvania	554, 556, 567, 588, 678, 679
Symphonic	588, 594, 683, 688
Tandy	581, 588
Tashiko	588, 676
Tatung	594, 682
Teac	588, 594, 682
Technics	554, 633, 678
Teknika	554, 588, 676, 678, 687
Toshiba	534, 535, 567, 584, 590, 680,
TOSTIIDU	684, 688
Totevision	591, 675, 676, 687
Unitech	675
Vector Research	534, 592, 600, 674, 677, 683
Video Concepts	534, 568, 592, 600, 674, 677,
vidoo oonoopis	683
Wards	534, 588, 595, 608, 675, 676,
vvui do	678, 680, 681, 684, 687, 688
XR-1000	588, 678, 681
Yamaha	581, 592, 594, 600, 674, 682,
ramana	683
Zenith	500, 501, 533, 747
45Hdl	000, 001, 000, 141

### TV/VCR Combo

Programming for combination devices: Program the remote control in TV mode and then in VCR mode.

Broksonic	748	
Goldstar	747	
Panasonic	747	
Quasar	747	
Zenith	747	



## Codes DEVICE CODES FOR PROGRAMMING THE REMOTE

DVD Player Codes
Programming in AUX mode:
Press 1 before entering the DVD code.

Press 1 before en	tering the DVD code.
Aiwa	634, 694, 751
Alpine	653
Apex	654, 655, 743, 744
Broksonic	656, 752
Clarion	696
Classic	695
Daewoo	657
Denon	697, 698, 699, 700
Emerson	658, 701
Fisher	659
Funai	658
GE	702, 703
Go Video	692, 693
GPX	704
Hitachi	632, 635, 660, 705, 706, 707
JVC	636, 689, 708, 711
Konka	637, 638, 753
Koss	745
Magnavox	626, 661
Memorex	709
Mintek	710
Mitsubishi	629
NAD	701
Norcent	762
Onkyo	713
Oritron 7	23
Panasonic	639, 662, 663, 714, 715, 716,
i didoonio	717, 734
Philips	640, 641
Pioneer	665, 718, 719
Proscan	720
Qwestar	721,723
RCA	627, 650, 666, 690, 742, 749
Sampo	724
Samsung	651, 652, 667, 668, 691, 740,
Jamaung	741
Sansui	725, 754
Sanyo	643, 726
Sharp	669, 727, 746
Sherwood	728
Sonv	617, 644, 645, 670, 671, 729.
July	730, 731
Sylvania	658
Teac	732
Technics	733
Techwood	664
Toshiba	616, 646, 647, 672, 735, 736,
IUSIIIUd	750
Yamaha	737, 738, 739
Zenith	648, 673
7011101	040, 0/3

JVC	637, 683, 703, 725
Kenwood	
1101111000	649, 676, 691, 726, 728, 745
Luxman	752
Magnavox	654, 705, 740
Marantz	651, 740, 742, 743
NAD	739
Nakamichi	671, 748, 750
NEC	716, 739
Onkyo	642, 660, 662, 678
Optimus	648, 664, 734, 744, 749
Panasonic	643, 644, 652, 742, 746
Pioneer	658, 667, 668, 679, 702, 734
Proton	654, 705
Quasar	652, 742, 746
Radio Shack	744
RCA	635, 638, 704, 727
Sansui	753
Sanyo	741
Sharp	712, 713, 714, 715, 749
Sherwood	646, 670, 736, 738, 744
Sony	639, 645, 650, 687, 728, 729,
	730
Teac	684, 737
Technics	643, 644, 652, 742, 746
Toshiba	710
Yamaha	663, 730, 731, 732, 733, 745,
	747

### DVD/VCR Combo TV/DVD

Go Video	692, 693	
JVC	689	
RCA	690	
Samsung	667, 691	

Combo Codes
Programming for combination devices:
Program the remote control in TV mode and then in VCR (or AUX - press 1 before entering the DVD code) mode.

Aiwa	751	
Broksonic	752	
Konka	753	
Panasonic	734	
RCA	749	
Sansui	754	
Toshiba	750	

### **Tuner/Amplifier Codes**

Programming in AUX mode: Press 2 before entering the tuner/amplifier code.

Aiwa	636, 641, 656, 687, 718, 720,
	724, 725, 726, 775
Carver	653
Citizen	709
Curtis Mathes	734
Denon	647, 674
Fisher	653, 741
GE	711
Goldstar	677, 690
Harmon Kardon	640, 672, 751
Hitachi	717, 754
JBL	640

Notes